MARS – Middleware And Related Services

- **Highlights from this Meeting:**
  - IDL4 to Python Language Mapping RFP: reviewed final draft of RFP
    - Recommended issuance
  - DDS C# API Revised Submission: received status update
    - Extended to Reston (March 2022)
  - CWG Non-Fungible Tokens and Cyber Insurance DP: reviewed
    - Recommended for publication
  - DDS Service-based Discovery: continued discussion regarding need
    - Agreed technology needed and to continue RFP preparation
  - UML Profile for Rosetta (UPR): introduced proposal to evolve UPR
    - Add logical constraints via alignment with SysML 2.0 KerML/Predicates
    - Plan to prepare a new RFP -- to be issued from ADTF
  - Open Civic Architecture Framework (OCAF): received detailed introduction

• **Highlights from this Meeting (continued)**

- – Joint with Block Chain PSIG
  - • Smart Contracts RFI: reviewed next draft, targeting issuance in December 2021
  - • Disposable Self-sovereign Identities (SSID) RFI: reviewed latest responses
    - – Declared the RFI closed
    - – Next step: prepare RFP to standardize expression of context and its communication & consumption as a DSSID; issue from MARS or some other TF?
  - • IOTA Protocol RFC: reported current state
    - – RFC may be ready by March or June 2022
  - • Linked Encrypted Transaction Streams (LETS) RFP: reviewed status of initial submission
    - – Extended initial and revised submission deadlines: December 2021 and March 2022
  - • Distributed Immutable Data Objects (DIDO) RA: reviewed future plans
    - – Version 4.0 being prepared, targeting release in December 2021
    - – Reworks data concepts from perspective of taxonomies, privacy, data state, etc.

OBJECT MANAGEMENT GROUP ®

- **Highlights from this Meeting (continued)**
  - FACE Interop, IDL and IEF WGs met
    - FACE Interoperability WG:
      - Continue to meet jointly with counterparts in FACE Consortium
        » MOU for joint OMG/FACE Interop WG still pending legal review by FACE Consortium
        » No impact on joint WG meetings; just exercise care vis-à-vis information sharing
      - Established 3 breakout WGs with co-chairs for each: DDS, CORBA, IDL4
        » To meet frequently in between quarterly TC meeting weeks
    - IDL WG:
      - Focused on IDL4 to C++ language mapping submission
    - IEF WG:
      - Reviewed application of IEF to support Zero Trust Environments
      - Initiated exploration of how IEF can support OCAF (OCS DSIG)

- **Deliverables from this Meeting:**
  – Technology Adoption Recommendation(s): none
  – RFP/RFI/RFC Recommendation(s):
    - IDL4 to Python Language Mapping RFP
  – TF Documents Issued
    - Cloud WG Non-Fungible Tokens and Cyber Insurance DP
- **Future Deliverables (In-Process):**
  – Technology Adoptions
    - DDS C# API: revised submission, Feb 21, 2022
    - DDS-TSN: revised submission, Nov 8, 2021
    - TCP/IP PSM for DDS Interoperability: revised submission, Feb 21, 2022
    - IDL4 to C++ Language Mapping: revised submission, Nov 8, 2021
    - Linked Encrypted Transaction Streams (LETS): initial submission, Nov 8th, 2021

- **Future Deliverables (In-Process) continued:**
  - RFP/RFI/RFC Recommendations to Issue
    - DDS Service-based Discovery RFP: issue 2021 Q4
    - Smart Contracts RFI: issue 2021 Q4
    - IOTA Protocol RFC: issue 2022 Q2?
  - TF Documents
    - Distributed Immutable Data Objects (DIDO) RA V4.0: publish 2021 Q4
    - Cloud WG Discussion Paper:
      - Practical Guide to Cloud Data Governance: publish in 2022 Q1
      - Cloud Service Agreement Template: publish in 2022 Q1
      - Everything as a Service: A Guide to XaaS: publish in 2022 Q2
      - Practical Guide to Cloud Computing, version 4: 2022 Q3
- **Liaisons**
  - FACE Consortium (MOU in process)

- **Agenda Items for the Next Meeting:**
  - Review initial submission: Linked Encrypted Transaction Streams
  - Review revised submission: DDS TSN Integration API
  - Review revised submission: IDL4 to C++ Language Mapping
  - Review latest draft RFP: DDS Service-based Discovery
  - Joint with BC PSIG:
    - Linked Encrypted Transaction Streams RFP: review initial submission
    - Disposable Self-sovereign Identities (SSID) (exact title TBD) RFP: review latest draft (TBD)
    - Smart Contracts RFI: review for issuance
    - DIDO RA V4 DP: review for publication
  - Continue collaboration with BC PSIG, Cloud Working Group, FACE Consortium
  - MARS WGs to meet: IDL, IEF, FACE Interop, SNC?